

Federal Title V Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Griffin Pipe Products Co.
Facility Name:	Griffin Pipe Products Co.
Facility Location:	10 Adams Street, Lynchburg Virginia
Registration Number:	30397
Permit Number	SCRO30397

August 21, 2006
Effective Date

August 20, 2011
Expiration Date

T. L. Henderson, Regional Director, South Central Regional Office

August 21, 2006
Signature Date

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I. Facility Information

Permittee

Griffin Pipe Products Co.
1400 Opus Place
Downer's Grove, IL 60515

Responsible Official

Paul T. Ciolino
President

Facility

Griffin Pipe Products Co.
10 Adams Street
Lynchburg

Contact Person

Chris Sonne
Environmental Engineer
804-522-4753

EPA Identification Number: 51-680-0095

Facility Description: NAICS 331511 [SIC Code 3321] – The facility melts scrap iron in a cupola using coke as fuel and treats the molten iron with additives to make ductile iron. The molten iron is poured into water cooled centrifugal casting machines to make pipe that is used in water supply systems. After casting the pipe is processed in an annealing oven. The pipe is then finished by grinding and cutting where necessary to meet specification, lined with a thin layer of cement, and painted.

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Melting Department							
S1	fugitive	Charging System Scrap Steel Handling Coke and Alloy Handling	50 tons/hr	None	N/A	N/A	None
S2	EP57	94" Cupola pre-1972	50 tons/hr 143 MMBtu/hr	None	N/A	N/A	None
	EP83			Afterburner GMD Environ. Tech. fabric filter - Model 05-850	S2A1 S2A2	CO PM-10, metal HAPs	None None
S8	fugitive	Iron Trough	50 tons/hr	None	N/A	N/A	None
S3	EP81	Desulfurization Ladle with N ₂ nozzles	50 tons/hr	ETA Engineering fabric filter	S3A1	PM-10, metal HAPs	None
S4	fugitive	Forehearth - Iron Holding Ladle	50 tons/hr	None	N/A	N/A	None
S5	fugitive	Alloy Addition - Dump Car and Scales	50 tons/hr	None	N/A	N/A	None
S6	EP81	Magnesium Plunging Hood	50 tons/hr	ETA Engineering fabric filter	S3A1	PM-10, metal HAPs	None
S20	EP83	Iron Melting Dust Treatment System	1.14 tons/hr	GMD Environ. Tech. fabric filter - Model 05-850	S2A2	PM-10	6/21/2004

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
S21	EP81	Iron Plunging/Desulfurization Dust Treatment System	1.14 tons/hr	ETA Engineering fabric filter	S3A1	PM-10	6/21/2004
S22	EP82	Dust Treatment Chemical Silo	2200 ft ³ /100 tons – 20 tons/hr	GMD Enviro. Tech. fabric filter	S22A1	PM-10	4/27/2005
Pipe Making							
S7	fugitive	Centrifugal Casting Machine #1 Centrifugal Casting Machine #2 Centrifugal Casting Machine #3	25.4 tons/hr 29.9 tons/hr 14.0 tons/hr	None	N/A	N/A	None
S10	EP84	Annealing Oven	56 MMBtu/hr	None	N/A	N/A	None
S18	EP44	Shell Sand Silo	100 tons	Whirl Air Flow fabric filter	S18A1	PM-10	None
S19	fugitive	Shell Core Production	0.75 tons/hr	None	N/A	N/A	None
Finishing							
S11	EP97	Grinder	50 tons/hr	Camcorp fabric filter	S11A1	PM-10	None
S12	fugitive	Quick Dry Paint Pad	5 gal/hr	None	N/A	N/A	None
S13	EP91	Cement Silo	127 tons	Griffin fabric filter	S13A1	PM-10	None
S14	EP92	Sand Silo	127 tons	Griffin fabric filter	S14A1	PM-10	None
S16	EP88, EP89, EP90	Painting Machines #1 & #3	45 gal/hr	None	N/A	N/A	None
S23	EP23	Sand Transfer Silo	75 tons	Dynamic Air fabric filter	S23A1	PM-10	6/21/2004

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

(9 VAC 5-80-110, 9 VAC 5-40-2410, 9 VAC 5-40-280 B)

9. Emissions from the operation of the Desulfurization (S3) process shall not exceed the limits specified below:

PM-10 44.6 lbs/hr

Sulfur Dioxide 2000 ppm

(9 VAC 5-80-110, 9 VAC 5-40-260, 9 VAC 5-40-280 A)

10. Emissions from the operation of the Magnesium Plunging (S6) process shall not exceed the limits specified below:

PM-10 44.6 lbs/hr

Sulfur Dioxide 2000 ppm

(9 VAC 5-80-110, 9 VAC 5-40-260, 9 VAC 5-40-280 A)

11. The throughput of treatment material for the iron melting dust treatment system (S20) shall not exceed 693 tons per year, calculated monthly as the sum of each consecutive 12-month period.

(9 VAC 5-80-110, 9 VAC 5-80-1180, Condition 7 of 6/21/2004 permit)

12. The throughput of treatment material for the iron plunging/desulfurization dust treatment system (S21) shall not exceed 29 tons per year, calculated monthly as the sum of each consecutive 12-month period.

(9 VAC 5-80-110, 9 VAC 5-80-1180, Condition 8 of 6/21/2004 permit)

13. Emissions from the operation of the iron melting dust treatment system (S20) shall not exceed the limits specified below:

Particulate Matter 2.7 lbs/hr 7.6 tons/yr

PM-10 2.7 lbs/hr 7.6 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers III.A.11 and III.D.

(9 VAC 5-80-110, 9 VAC 5-50-260, Condition 9 of 6/21/2004 permit)

14. The throughput of powdered treatment chemical through the bulk silo (S22) shall not exceed 18,250 tons per year, calculated monthly as the sum of each consecutive 12 month period.

(9 VAC 5-80-110, 9 VAC 5-80-1180, Condition 4 of 4/27/2005 permit)

15. Visible Emissions from the Cupola (S2) stack shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall

not exceed 60 percent opacity.
(9 VAC 5-80-110, 9 VAC 5-40-80)

16. Visible Emissions from the Cupola (S2) fabric filter (S2A2) stack and the Desulfurization process (S3) and the Magnesium Plunging process (S6) fabric filter (S3A1) stack shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity.
(9 VAC 5-80-110, 9 VAC 5-50-80, 9 VAC 5-50-260, Condition 11 of 6/21/2004 permit)
17. Visible emissions from the powdered treatment chemical bulk silo (S22) fabric filter (S22A1) shall not exceed 5 percent opacity.
(9 VAC 5-80-110, 9 VAC 5-50-260, Condition 5 of 4/27/2005 permit)

B. Maintenance/Operating Procedures

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions from the Cupola (S2), Desulfurization process (S3), and Magnesium Plunging process (S6) with respect to air pollution control equipment and process equipment which affect such emissions.

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
- b. Have available written operating procedures for the process equipment and associated air pollution control equipment. These procedures shall be based on the manufacturer's recommendations, at minimum.
- c. Operators shall be trained in the proper operation of the process equipment and associated air pollution control equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions. The permittee shall maintain records of the training provided including the names of the trainees, the date of training, and the nature of the training.

(9 VAC 5-80-110, 9 VAC 5-40-20, 9 VAC 5-50-20)

C. Monitoring

1. Each of the fabric filters S2A2, S3A1, and S22A1 shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the fabric filter is operating.
(9 VAC 5-80-110, 9 VAC 5-50-20, 9 VAC 5-50-260, Condition 6 of 6/21/2004 permit)

2. At least one time per calendar week an observation of the presence of visible emissions from the Cupola (S2) stack shall be made. The presence of visible emissions shall require the permittee to:
 - a. take timely corrective action such that the emissions point, with visible emissions, resumes operation with no visible emissions, or,
 - b. conduct a visible emission evaluation (VEE) on the emissions point, with visible emissions, in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A) for a minimum of six (6) minutes, to assure visible emissions are 20 percent opacity or less, as required by Condition III.A.15. If any of the observations exceed the opacity limitation of 20 percent, the observation period shall continue until a total of sixty (60) minutes of observation have been completed. Timely corrective action shall be taken, if necessary, such that the emissions point resumes operation within the 20 percent opacity limit.

The permittee shall maintain an emissions point observation log to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action, and the name of the observer. If an emissions point has not been operated for any period during the week it shall be noted in the log book.

(9 VAC 5-80-110 E, 9 VAC 5-80-110 K)

3. At least one time per calendar week an observation of the presence of visible emissions from the fabric filter (S2A2 & S3A1) stacks shall be made. The presence of visible emissions shall require the permittee to:
 - a. take timely corrective action such that the emissions point, with visible emissions, resumes operation with no visible emissions, or,
 - b. conduct a visible emission evaluation (VEE) on the emissions point, with visible emissions, in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A) for a minimum of six (6) minutes, to assure visible emissions are 20 percent opacity or less, as required by Condition III.A.16. If any of the observations exceed the opacity limitation of 20 percent, the observation period shall continue until a total of sixty (60) minutes of observation have been completed. Timely corrective action shall be taken, if necessary, such that the emissions point resumes operation within the 20 percent opacity limit.

The permittee shall maintain an emissions point observation log to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action, and the name of the observer. If an emissions point has not been operated for any period during the week it shall be noted in the log book.

(9 VAC 5-80-110 E, 9 VAC 5-80-110 K, 40 CFR 64 and 7/5/06 CAM Plan)

4. While operating, but no more than once per week, an observation of the presence of visible emissions from the powdered treatment chemical bulk silo (S22) fabric filter (S22A1) stack shall be made. If visible emissions are observed the permittee shall:
 - a. take timely corrective action such that the emissions point, with visible emissions, resumes operation with no visible emissions, or,
 - b. conduct a visible emission evaluation (VEE) on the emissions point, with visible emissions, in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A) for a minimum of six (6) minutes, to assure visible emissions are 5 percent opacity or less, as required by Condition III.A.17. If any of the observations exceed the opacity limitation of 5 percent, timely corrective action shall be taken such that the emissions point resumes operation within the 5 percent opacity limit.

The permittee shall maintain an emissions point observation log to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action, and the name of the observer. If an emissions point has not been operated for any period during the week it shall be noted in the log book.

(9 VAC 5-80-110 E, 9 VAC 5-80-110 K)

D. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the South Central Regional Office. These records shall include, but are not limited to:

- a. The annual consumption of coke calculated monthly as the sum of each consecutive 12-month period.
- b. Records of all coke shipments purchased, indicating the sulfur content per shipment.
- c. Annual throughput of treatment material for the iron melting dust treatment system (S20), calculated monthly as the sum of each consecutive 12-month period.
- d. Annual throughput of treatment material for the iron plunging/desulfurization dust treatment system (S21), calculated monthly as the sum of each consecutive 12-month period.
- e. Annual throughput of powdered treatment chemical through the bulk silo (S22), calculated monthly as the sum of each consecutive 12 month period.
- f. Material Safety Data Sheets (MSDS) or other vendor information showing composition of the powdered treatment chemicals.

- g. Record of maintenance, inspections, and training for the process equipment and air pollution equipment as required by Condition III.B
- h. Records of the visible emission and opacity observations for the Cupola (S2) as required by Condition III.C.2.
- i. The recordkeeping requirements of the 7/5/06 CAM Plan.
- j. Records of the visible emission and opacity observations for the powdered treatment chemical bulk silo (S22) fabric filter (S22A1) required by Condition III.C.4.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-40-50, 9 VAC 5-50-50, 9 VAC 5-80-110, Condition 12 of 6/21/2004 permit, Condition 6 of 4/27/2005 permit)

E. Reporting

The permittee shall submit written reports containing the information pertaining to the CAM Plan for the fabric filter (S2A2 & S3A1) stacks to the South Central Regional Office no later than **March 1** and **September 1** of each calendar year. Each report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G and shall include the required information as stated in the CAM Plan.

(9 VAC 5-80-110, 40 CFR 64.9 and 7/5/06 CAM Plan)

IV. Pipe Casting Department Requirements – Casting (S7), Annealing (S10), and Shell Sand Silo (S18)

A. Limitations

1. Particulate emissions from the loading of the Shell Sand Silo (S18) shall be controlled by the use of a fabric filter (S18A1).
(9 VAC 5-80-110, 9 VAC 5-40-20)
2. The approved fuels for the Annealing oven (S10) are natural gas and fuel oil. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-110, 9 VAC 5-40-20)
3. Emissions from the operation of the Casting process (S7) shall not exceed the limits specified below:

PM-10	Machine #1	35.8 lbs/hr
PM-10	Machine #2	39.9 lbs/hr
PM-10	Machine #3	24.0 lbs/hr

(9 VAC 5-80-110, 9 VAC 5-40-260)

4. Emissions from the operation of the Annealing oven (S10) shall not exceed the limits specified below:

PM-10 44.6 lbs/hr

Sulfur Dioxide 147.8 lbs/hr

(9 VAC 5-80-110, 9 VAC 5-40-260, 9 VAC 5-40-280)

5. Visible emissions from the Annealing oven (S10) shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60% opacity.
(9 VAC 5-40-80, 9 VAC 5-80-110)
6. Visible emissions from the Sand Shell Silo (S18) fabric filter (S18A1) stack shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity.
(9 VAC 5-50-80, 9 VAC 5-80-110)

B. Monitoring

At least one time per calendar week an observation of the presence of visible emissions from the Annealing oven (S10) stack and Sand Shell Silo (S18) fabric filter (S18A1) stack shall be made. The presence of visible emissions shall require the permittee to:

- a. take timely corrective action such that the emissions point, with visible emissions, resumes operation with no visible emissions, or,
- b. conduct a visible emission evaluation (VEE) on the emissions point, with visible emissions, in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A) for a minimum of six (6) minutes, to assure visible emissions from the Annealing oven are 20 percent opacity or less, as required by Conditions IV.A.5 and IV.A.6. If any of the observations exceed the opacity limitation of 20 percent, the observation period shall continue until a total of sixty (60) minutes of observation have been completed. Timely corrective action shall be taken, if necessary, such that the emissions point resumes operation within the 20 percent opacity limit.

The permittee shall maintain an emissions point observation log to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action, and the name of the observer. If the process has not been operated for any period during the week it shall be noted in the log book.
(9 VAC 5-80-110 E, 9 VAC 5-80-110 K)

C. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the South Central Regional Office. These records shall include, but are not limited to:

- a. Annual throughput of natural gas and fuel oil, calculated monthly as the sum of each consecutive 12-month period.
- b. Records of all fuel oil shipments purchased, indicating the sulfur content per shipment.
- c. Records of the visible emission and opacity observations for the Annealing oven (S10) and the Sand Shell Silo (S18) fabric filter (S18A1) as required by Condition IV.B.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-40-50, 9 VAC 5-80-110)

V. Finishing Department Requirements – Pipe Grinding (S11), Quick Dry Pipe Paint (S12), Cement Silo (S13), Sand Silo (S14), Pipe Painting Machines (S16), and Sand Transfer Silo (S23)

A. Limitations

1. Particulate emissions from the Pipe Grinding process (S11) shall be controlled by a fabric filter (S11A1). The fabric filter shall be provided with adequate access for inspection.
(9 VAC 5-80-110, 9 VAC 5-40-20)
2. Particulate emissions from the loading of the Cement Silo (S13) shall be controlled by a fabric filter (S13A1). The fabric filter shall be provided with adequate access for inspection.
(9 VAC 5-80-110, 9 VAC 5-40-20)
3. Particulate emissions from the loading of the Sand Silo (S14) shall be controlled by a fabric filter (S14A1). The fabric filter shall be provided with adequate access for inspection.
(9 VAC 5-80-110, 9 VAC 5-40-20)
4. Particulate matter emissions from the sand transfer silo (S23) shall be controlled by a silo fabric filter (S23A1). The silo fabric filter shall be provided with adequate access for inspection and shall be in operation when sand is being transferred to the sand transfer silo.
(9 VAC 5-80-110, 9 VAC 5-50-260, Condition 5 of 6/21/2004 permit)
5. Visible emissions from the Pipe Grinding process (S11) fabric filter (S11A1) stack shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60% opacity.
(9 VAC 5-40-80, 9 VAC 5-80-110)
6. Visible emissions from the Cement Silo (S13) fabric filter (S13A1) stack shall not exceed 20% opacity except during one six-minute period in any one hour in which

visible emissions shall not exceed 60% opacity.
(9 VAC 5-40-80, 9 VAC 5-80-110)

7. Visible emissions from the Sand Silo (S14) fabric filter (S14A1) stack shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60% opacity.
(9 VAC 5-40-80, 9 VAC 5-80-110)
8. Visible emissions from the Pipe Painting Machines (S16) stack shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60% opacity.
(9 VAC 5-40-80, 9 VAC 5-80-110)
9. Visible emissions from the sand transfer silo (S23) fabric filter (S23A1) stack shall not exceed 5 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-50-80, 9 VAC 5-80-110, 9 VAC 5-50-260, Condition 11 of 6/21/2004 permit)

B. Monitoring

At least one time per calendar week an observation of the presence of visible emissions from the Pipe Grinding process (S11) fabric filter (S11A1), Cement Silo (S13) fabric filter (S13A1), Sand Silo (S14) fabric filter (S14A1), and Pipe Painting Machines (S16) stacks shall be made. The presence of visible emissions shall require the permittee to:

- a. take timely corrective action such that the emissions point, with visible emissions, resumes operation with no visible emissions, or,
- b. conduct a visible emission evaluation (VEE) on the emissions point, with visible emissions, in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A) for a minimum of six (6) minutes, to assure visible emissions from the emissions point are 20 percent opacity or less, as required by Conditions V.A.5, V.A.6, V.A.7, and V.A.8. If any of the observations exceed the opacity limitation of 20 percent, the observation period shall continue until a total of sixty (60) minutes of observation have been completed. Timely corrective action shall be taken, if necessary, such that the emissions point resumes operation within the 20 percent opacity limit.

The permittee shall maintain an emissions point observation log to demonstrate compliance. The logs shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action, and the name of the observer. If the emissions point has not been operated for any period during the week it shall be noted in the log book.

(9 VAC 5-80-110 E, 9 VAC 5-80-110 K)

2. While operating, but no more than once per week, an observation of the presence of visible emissions from the sand transfer silo fabric filter (S23A1) stack shall be made. If visible emissions are observed the permittee shall:
 - a. take timely corrective action such that the emissions point, with visible emissions, resumes operation with no visible emissions, or,
 - b. conduct a visible emission evaluation (VEE) on the emissions point, with visible emissions, in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A) for a minimum of six (6) minutes, to assure visible emissions are 5 percent opacity or less, as required by Condition V.A.9. If any of the observations exceed the opacity limitation of 5 percent, timely corrective action shall be taken such that the emissions point resumes operation within the 5 percent opacity limit.

The permittee shall maintain an emissions point observation log to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action, and the name of the observer. If an emissions point has not been operated for any period during the week it shall be noted in the log book.

(9 VAC 5-80-110 E, 9 VAC 5-80-110 K)

C. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the South Central Regional Office. These records shall include, but are not limited to:

- a. Monthly and annual speciated hazardous air pollutant emissions (in tons) from the Paint Dip Tank (S36). Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period.
- b. Records of the visible emission and opacity observations for the Pipe Grinding process (S11) fabric filter (S11A1), Cement Silo (S13) fabric filter (S13A1), Sand Silo (S14) fabric filter (S14A1), and Pipe Painting Machines (S16) stacks as required by Condition V.B.
- c. Records of the visible emission and opacity observations for the sand transfer silo (S23) fabric filter (S23A1) required by Condition V.B.2.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-40-50, 9 VAC 5-50-50, 9 VAC 5-80-110, Condition 6 of 3/19/98 Permit)

VI. Facility Wide Conditions

A. Limitations

1. Unless otherwise specified in this permit, for an existing emission unit at the facility, visible emissions shall not exceed 20 percent opacity, except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-40-80 and 9VAC 5-80-110)
2. Unless otherwise specified in this permit, for a new emission unit at the facility, visible emissions shall not exceed 20 percent opacity, except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-50-80 and 9VAC 5-80-110)

B. Testing

Upon request of the DEQ the permittee shall conduct emissions tests in accordance with procedures approved by the DEQ and provide, or cause to be provided, emission testing facilities as follows:

- Sampling ports adequate for test methods applicable to such source.
- Safe sampling platforms.
- Safe access to sampling platforms.
- Utilities for sampling and testing equipment.

(9 VAC 5-40-30, 9 VAC 5-80-110)

VII. Facility Wide Conditions for Hazardous Air Pollutant Emissions

Unless the permittee obtains federally enforceable limits on its facility-wide emissions of hazardous air pollutants (HAPs) to below major-source thresholds prior to the specified date, the following federal requirements, derived from 40 CFR Part 63, will apply. For each standard, "requirements" include all control, operational, work practice, monitoring, recordkeeping, reporting, and testing requirements, as applicable.

A. Limitations

1. Except where this permit is more restrictive, the iron foundry operations shall comply with the work practice standards in §63.7700(b) or (c), as applicable, of 40 CFR Part 63 Subpart EEEEE (Iron and Steel Foundries NESHAP).
(9 VAC 5-60-90, 9 VAC 5-60-100, 9 VAC 5-80-110 and 40 CFR 63 Subpart EEEEE)
2. Except where this permit is more restrictive, on April 23, 2007, the iron foundry operations shall comply with the requirements of 40 CFR Part 63 Subpart EEEEE (Iron and Steel Foundries NESHAP).
(9 VAC 5-60-90, 9 VAC 5-60-100, 9 VAC 5-80-110 and 40 CFR 63 Subpart EEEEE)
3. Except where this permit is more restrictive, on January 2, 2007, the pipe coating operations shall comply with the requirements of 40 CFR Part 63 Subpart MMMM

(Coating of Miscellaneous Metal Parts and Products NESHAP).
(9 VAC 5-60-90, 9 VAC 5-60-100, 9 VAC 5-80-110 and 40 CFR 63 Subpart MMMM)

4. Except where this permit is more restrictive, on September 13, 2007, the boilers and process heaters shall comply with the requirements of 40 CFR Part 63 Subpart DDDDD (Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP).
(9 VAC 5-60-90, 9 VAC 5-60-100, 9 VAC 5-80-110 and 40 CFR 63 Subpart DDDDD)

VIII. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
BL1	Hot water gas-fired boiler	9 VAC 5-80-720 C		2.5 MMBtu/hr
PH1	Gas fired Process Heaters	9 VAC 5-80-720 C		Each unit less than 10 MMBtu/hr
T1	20,000 gal fuel oil storage tank 250 gal gasoline storage tank 1,000 gal hydraulic oil storage tank 500 gal motor oil storage tank 500 gal gear oil storage tank	9 VAC 5-80-720 B	VOC	
PC1	Parts Cleaner	9 VAC 5-80-720 B	VOC	
DO1	Drain-out Tubs	9 VAC 5-80-720 B	PM-10, NO _x , SO _x , VOC, HAPs	

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

IX. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this

permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
None		

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9 VAC 5-80-140)

X. General Conditions

A. Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.

4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D, and 9 VAC 5-80-170 B)

C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(9 VAC 5-80-110 F)

3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
- b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
 - (1) Exceedance of emissions limitations or operational restrictions;
 - (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,
 - (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that “no deviations from permit requirements occurred during this semi-annual reporting period.”

(9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to DEQ and EPA no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
2. The identification of each term or condition of the permit that is the basis of the certification.
3. The compliance status.
4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.

6. Such other facts as the permit may require to determine the compliance status of the source.
7. One copy of the annual compliance certification shall be sent to EPA at the following address:
Clean Air Act Title V Compliance Certification (3AP00)
U. S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029.

(9 VAC 5-80-110 K.5)

E. Permit Deviation Reporting

The permittee shall notify the South Central Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition X.C.3 of this permit.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

In the event that any affected facilities or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the South Central Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the South Central Regional Office.

(9 VAC 5-20-180 C)

G. Severability

The terms of this permit are severable. If any condition, requirement, or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.

(9 VAC 5-80-190 and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.

(9 VAC 5-80-110 G.5)

L. Duty to Submit Information

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.

(9 VAC 5-80-110 G.6)

2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.

(9 VAC 5-80-110 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-305 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-355. The actual emissions covered by the permit program fees for the proceeding year shall be calculated by the owner and submitted to the Department by **April 15** of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-40-20 E and 9 VAC 5-50-20 E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1. (9 VAC 5-80-110 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-160)
2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)
3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the conditions of paragraph 2 are met.
2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.

- c. During the period of malfunction, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit.
- d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F 2 b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
- e. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
- f. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-190 C and 9 VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

Y. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

Z. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-110 I)